

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for allocating resources, comprising:

providing a resource allocation system comprising (i) at least one queue of work items, each of the work items having an associated service time, and (ii) at least one resource to service the work items in the at least one queue;

placing, by a computer, a time delay, corresponding to a non-business time period, in at least one position of said at least one queue, whereby the non-business-time period is ignored in determining at least one of a service time and a time remaining in the at least one queue for work items positioned at queue positions farther from a head of the at least one queue than the at least one position of the time delay; and

based on the at least one of a service time and remaining time, allocating, by a computer, resources associated with said at least one queue to service work items according to predetermined algorithms.

2. (Currently Amended) The method of Claim 1, wherein said placing step comprises:

accessing a calendar associated with said at least one queue, said calendar including entries corresponding to business time and non-business time;

determining when a non-business time period begins; and

placing a duration of said non-business time period in a firstselected position in said at least one queue to indicate when said non-business time begins.

3. (Currently Amended) The method of claim 2, wherein said firstselected position is at the head of said at least one queue and wherein said at least one queue is a delta queue.

4. (Currently Amended) The method of claim 2, wherein said firstselected position is at a tail of said at least one queue and wherein said at least one queue is a delta queue.

5. (Canceled)

6. (Currently Amended) The method of Claim 1, wherein said resource allocation system at least one queue includes a plurality of queues of work items, each of said plurality of queues having an associated calendar indicating business time and non-business time periods.

7. (Currently Amended) The method of Claim 6, wherein said predetermined algorithms perform resource allocation ~~for each of said plurality of queues~~ independently of the calendar associated with the queues.

8. (Original) The method of Claim 6, further comprising:

displaying, at a user interface, a resource status associated with a first queue of said plurality of queues, the resource status being displayed in relation to a real time clock included in the resource allocation system.

9. (Currently Amended) The method of Claim 8, wherein said displaying step comprises:

determining [[the]] service times for work items in said first queue;

selecting [[the]] a calendar associated with said first queue;

converting each of the service times into an equivalent real time index;

~~indexing said calendar into a table having a real time index; and~~

~~computing said time commitments into a time interval according to said table~~

thereafter determining, for each of the real time indices, a corresponding business time interval; and

converting each of the corresponding business time intervals into corresponding modified service times.

10. (Currently Amended) The method of Claim 9, wherein said indexing step comprises:

selecting a minimum time interval;

determining, for the selected calendar, the calendar start time;

subtracting [[the]] a selected real time from the calendar start time to provide a relative real time; and

taking the modulus of the relative real time calendar time by the minimum time interval to output an adjusted time.

11. (Currently Amended) The method of Claim 10, wherein the adjusted time is said computing step comprises:

~~determining the remainder of the modulus operation of said taking the modulus step.~~

12. (Currently Amended) A resource allocation system, comprising:

a plurality of resources;

a plurality of queues for receiving work items to be serviced by the plurality of resources;

a scheduler operable, by a computer, to receive the work items, determine at least one of a service time and time remaining in queue for said work items, place said work items into a selected queue [[one]] of [[a]] the plurality of queues, and allocate resources to service work items in the plurality of queues resources for each of said queues according to predetermined resource allocation algorithms;

a timer operable to time the duration of item track the at least one of a service time and time remaining in queue in said plurality of queues;

a plurality of electronic calendars corresponding to said plurality of queues, wherein each queue has an associated calendar, and wherein each calendar has entries corresponding to business time and non-business time,

wherein said scheduler is operable to monitor each of said calendars and, upon the start of a non-business time for a firstselected calendar, place a time delay corresponding to the length of said non-business time into the queue associated with the firstselected calendar, whereby the non-business-time period is ignored in determining the at least one of a service time and time remaining in queue for at least some of the work items in the queue associated with the selected calendar.

13. (Original) The resource allocation system of Claim 12, further comprising:

a user interface operable to display information related to current status of said plurality of queues; and

a conversion system operable to convert real time to business time for display on said user interface.

14. (Currently Amended) The resource allocation system of Claim 13, wherein said conversion system is operable to:

determine the service times for work items in said plurality of queues;

select [[the]] a calendar associated with each of said plurality of queues;

convert each of the service times into an equivalent real time index;

index said calendars into a table having a real time index; and

compute said service times into a time interval according to said table

thereafter determine, for each of the real time indices, a corresponding business time interval; and

convert each of the corresponding business time intervals into corresponding modified service times.

15. (Currently Amended) The resource allocation system of Claim 14, wherein said conversion system creates said index according to the following steps:

~~selecting~~select a minimum time interval;

~~determining~~determine, for the selected calendar, the calendar start time;

~~subtracting the~~subtract a selected real time from the calendar start time to provide a relative real time; and

taking the modulus of the relative real time calendar time by the minimum time interval to output an adjusted time.

16. (Currently Amended) The resource allocation system of Claim 15, wherein the adjusted time is said service time is computed according to the remainder of the modulus operation of said taking the modulus step.

17. (Currently Amended) The resource allocation system of Claim 12, wherein said scheduler is operable to:

access a business time calendar which includes information corresponding to business time and non-business time;

determine when a non-business time period begins; and

place a duration of said non-business time period into said queue to indicate when said non-business time begins.

18. (Original) The resource allocation system of Claim 12, wherein said queues are delta queues.

19. (Original) The resource allocation system of Claim 12, wherein said scheduler is operable to:

determine which of said plurality of queues into which said work item should be placed, each of said queues having an associated calendar including business time and non-business time periods; and

place said work item at the tail of one of said plurality of queues based on said determination.

20. (Currently Amended) The resource allocation system of Claim 12, wherein said predetermined algorithms perform resource allocation of each of said plurality of queues independently of the calendar associated with the queues.

21. (Canceled)

22. (Canceled)

23. (Canceled)

24. (Canceled)

25. (Canceled)

26. (Canceled)

27. (Canceled)

28. (Canceled)

29. (Canceled)

30. (Canceled)

31. (New) A computer readable medium comprising computer executable instructions to perform the steps of Claim 1.

32. (New) The method of Claim 1, wherein the time delay stops a clock associated with the at least one queue for the duration of the time delay.

33. (New) In a contact center, a method for convert from real time to business time and from business time to real time, comprising:

selecting a real time, the real time being related to a state of a work item;

determining, for the selected real time and by a computer, a real time index into a real time-to-business time conversion table;

determining, from the real time-to-business time conversion table and by a computer, a business time interval;

combining, by a computer, the business time interval with a service time to provide a modified service time; and

determining, for the modified service time and by a computer, an equivalent real time for the modified service time, the modified service time being used as a business time index into a business time-to-real time conversion table.

34. (New) The method of claim 33, wherein the real time index is determined as follows:

selecting a calendar having a calendar start time;  
subtracting the calendar start time from the selected real time to provide a relative real time;

dividing the relative time by a unit of calendar time to provide the real time index.

35. (New) The method of claim 34, further comprising:

multiplying the equivalent real time by the unit of calendar of time to provide an intermediate real time; and

adding a calendar start time to the intermediate real time to provide an output real time.

36. (New) The method of claim 33, further comprising:

subtracting a selected second real time from calendar start time to provide a relative real time;

dividing the relative real time by a unit of calendar time to output an adjusted real time;

adding a service commitment time to the adjusted real time to provide an modified service commitment time; and

dividing the modified service commitment time by the unit of calendar time to provide a final time value.

37. (New) The method of Claim 33, further comprising:

providing a plurality of queues for receiving a plurality of work items, a plurality of resources for servicing the plurality of work items, wherein a resource distribution algorithm, using at least one of business and real time, distributes enqueued work items to available resources and wherein a plurality of business time calendars are associated with the plurality of queues; and further comprising:

determining, by a computer, the service times for work items in a selected queue;

selecting, by a computer, a business time calendar associated with the selected queue;

converting each of the service times into an equivalent real time by applying, to each of the service times, the steps of claim 33.

38. (New) The method of Claim 33, further comprising:

providing a resource allocation system comprising (i) at least one queue of work items, each of the work items having an associated service time, and (ii) at least one resource to service the work items in the at least one queue;

placing a time delay, corresponding to a non-business time period, in at least one position of said at least one queue, whereby the non-business-time period is ignored in determining at least one of a service time and a time remaining in the at least one queue for work items positioned at queue positions farther from a head of the at least one queue than the at least one position of the time delay; and

based on the at least one of a service time and remaining time, allocating resources associated with said at least one queue to service work items according to predetermined algorithms.

39. (New) A computer readable medium comprising computer executable instructions to perform the steps of Claim 33.

40. (New) The method of Claim 1, further comprising:  
selecting a real time, the real time being related to a state of a work item;  
determining, for the selected real time and by a computer, a real time index into a real time-to-business time conversion table;  
determining, from the real time-to-business time conversion table and by a computer, a business time interval;  
combining, by a computer, the business time interval with a service time to provide a modified service time; and  
determining, for the modified service time and by a computer, an equivalent real time for the modified service time, the modified service time being used as a business time index into a business time-to-real time conversion table.

41. (New) The resource allocation of claim 12, wherein the scheduler:  
selects a real time, the real time being related to a state of a work item;  
determines, for the selected real time and by a computer, a real time index into a real time-to-business time conversion table;  
determines, from the real time-to-business time conversion table and by a computer, a business time interval;  
combines, by a computer, the business time interval with a service time to provide a modified service time; and

determines, for the modified service time and by a computer, an equivalent real time for the modified service time, the modified service time being used as a business time index into a business time-to-real time conversion table.